

Docket No. 9815/55092

**Box Patent Application** Assistant Commissioner for Patents Washington, D.C. 20231

#### **NEW APPLICATION TRANSMITTAL**



Transmitted herewith for filing is the patent application of

Inventor(s):

Kevin M. Short

WARNING: Patent must be applied for in the name(s) of all of the actual inventor(s). 37 CFR 1.41(a) and 1.53(b).

For (title):

Method And Apparatus For The Compression and Decompression Of Image

Files Using A Chaotic System

#### 1. Type of Application

This new application is for a(n) (check one applicable item below):

Original

Design

Plant

NOTE: If one of the following 3 items apply then complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION IN PARENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION.

Divisional (37 CFR § 1.60)

Continuation

Continuation-in-part (CIP)

### **CERTIFICATION UNDER 37 CFR 1.10**

I hereby certify that this New Application Transmittal and the documents referred to as enclosed therein are being deposited with the United States Postal Service on this date 1/9/01 in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number EL108468358US \_ addressed to the: Assistant Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.

Lourdes Raphanella

(Type or print name of person mailing paper)

(Signature of person mailing paper)

Page 1 of 7

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#### 2. Benefit of Prior U.S. Application(s) (35 USC 120)

NOTE: If the new application being transmitted is a divisional continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

- The new application being transmitted claims the benefit of prior U.S. application(s) and enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.
- 3. Papers Enclosed Which Are Required For Filing Date Under 37 CFR 1.53(b) (Regular) or 37 CFR 1.153 (Design) Application
  - 25 Pages of specification
  - 5 Pages of claims
  - 1 Pages of Abstract
  - 8 Sheets of drawing
    - formal
    - x informal

NOTE: "Identifying indicia such as the serial number, group and unit, title of the invention, attorney's docket number, inventor's name, number of sheets, etc., not to exceed 2 3/4 inches (7.0 cm) in width may be placed in a centered location between the side edges within three fourths inch (19.1 mm) of the top edge. Either this marking technique on the front of the drawing or the placement, although not preferred, of this information and the title of the invention on the back of the drawings is acceptable." Proposed 37 CFR 1.84(1). Notice of March 9, 1988 (1090 O.G. 57-62).

# 4. Additional papers enclosed

- \_ Preliminary Amendment
- \_ Information Disclosure Statement (37 CFR 1.98)
- \_\_ Form PTO-1449
- \_ Citations
- Declaration of Biological Deposit
- Submission of "Sequence Listing," computer readable copy and/or amendment pertaining thereto for biotechnology invention containing nucleotide and/or amino acid sequence.
- \_ Authorization of Attorney(s) to Accept and Follow Instructions from Representative
- Special Comments
- Other

5. Declaration	or oath
<u>x</u>	Enclosed executed by (check all applicable boxes)
	$\underline{\mathbf{x}}$ inventor(s).
	legal representative of inventor(s). 37 CFR 1.42 or 1.43
	_ joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.
	_ this is the petition required by 37 CFR 1.47 and the statement required by 37 CFR 1.47 is also attached. See Item 13 below for fee.
	Not Enclosed.
<u></u>	Application is made by a person authorized under 37 CFR 1.41(c) on behalf of all the above named inventor(s). (The declaration or oath, along with the surcharge required by 37 CFR 1.16(e) can be filed subsequently).
NOTE: It is imports	t that all the correct inventor(s) are named for filing under 37 CFR 1.41(c) and 1.53(b).
	Showing that the filing is authorized. (Not required unless called into question. 37 CFR 1.41(d).
6. Inventorship	Statement
	amed inventors are each not the inventors of all the claims an explanation, including the ownership of the various claims at ned invention was made, should be submitted.
The inv	entorship for all the claims in this application are:
	X The same or
	Are not the same. An explanation, including the ownership of the various claims at the time the last claimed invention was made.
	is submitted will be submitted.
7. Language	
<u>X</u>	English
	non-English
	the attached translation is a verified translation. 37 CFR 1.52(d).

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8. Assignment						
<u>x</u> A	n assignment o	of the invention t	o <u>Uni</u>	versity of New H	ampshire	
						NMENT (DOCUMENT) 1906 is also attached.
w	ill follow.					
NOTE: "If an assignment of May 4, 1990 (1114 O	t is submitted with G. 77-78).	a new application, s	end two	separate letters-one fo	or the application an	d one for the assignment." Notice
9. Certified Copy Certified co	ppy(ies) of app	olication(s)				
(country)		(appln. no.)			(filed)	
(country)		(appln. no.)			(filed)	
(country)		(appln. no.)			(filed)	
from which priority	is claimed					
is(	are) attached.					·
_ wi	ll follow.					
10. Fee Calculatio	n (37 CFR 1.	16)				
<b>A.</b> <u>X</u>	Regula	r application				
		C	LAIMS	AS FILED		
Number filed		Number Extra		Rate	Y	Basic Fee 37 CFR 1.16(a) \$710.00
Total Claims (37 CFR 1.16(c))	10 - 20=	o	x	\$18.00/9.00		\$ O
Independent Claims (37 CFR 1.16(b)	) 3 - 3=	0	x	\$80.00/40.00		\$ 0
Multiple dependent clair (37 CFR 1.16(d))	n(s), if any			<b>\$270.00</b> /135		\$ 0
_ An	nendment dele	celling extra clai eting multiple de	pender	cies enclosed.		

NOTE: If the fees for extra claims are not paid on filing they must be paid or the claims cancelled by amendment, prior to the expiration of the time period set for response by the Patent and Trademark Office in any notice of fee deficiency. 37 CFR 1.16(d).

Filing Fee Calculation

\$710.00

В.			application 0037 CFR 1.16(f))	
		(\$520.	Filing Fee Calculation	\$
_		DI4		
C.			application 0037 CFR 1.16(9))	
		(\$450.	Filing fee calculation	\$
		04-4		
11. 51	nali Ent	ну знац	emenu(s)	
	<u>x</u> _	Verifie	ed Statement(s) that this is a filing by a small entity under 37 CFR 1.9 and 1	.27 is(are) attached.
			Filing Fee Calculation (50% of A, B or C above)	\$_355.00
				Φ_355.00
12. Re	equest fo	r Interi	national-Type Search (37 CFR 1.104(d)) (complete, if applicable)	
	_		prepare an international-type search report for this application at the nation on the merits takes place.	time when national
13. Fe	e Payme	ent Bein	g Made At This Time	•
		Not En	nclosed	
	_			
		_	No filing fee is to be paid at this time. (This and the surcharge required can be paid subsequently.)	1 by 37 CFR 1.16(e)
	<u>x</u>	Enclos		
		<u>x</u>	basic filing fee	\$355.00
		<u>x</u>	recording assignment (\$40.00; 37 CFR 1.21 (h))	\$ 40.00
			(	
		_	petition fee for filing by other	
			than all the inventors or person on behalf of the inventor where	
			inventor refused to sign or cannot	
			be reached. (\$130.00; 37 CFR 1.47	
			and 1.17(h))	\$
		-	for processing an application	
		_	with a specification in a non-	
			English language. (\$130.00; 37	
			CFR 1.52(d) and 1.17(k)	\$
			processing and retention fee	
			(\$130.00; 37 CFR 1.53(d) and	
			1.21 (l))	\$
		_	fee for international-type	
			search report (\$40.00; 37 CFR	
			1.21 (e)).	\$
			Total fees enclosed	\$_395.00

14. Method of	Paymer	it of rees
<u>x</u>	Check	in the amount of \$ 395.00
	Charge triplicat	Account No. <u>04-0932</u> in the amount of \$ This transmittal is submitted in te.
NOTE: Fees should	be itemize	d in such a manner that it is clear for which purpose the fees are paid. 37 CFR 1.22(b).
15. Authorizat	ion to C	Charge Additional Fees
WARNING: If no f WARNING: Accur authorized.	ees are to bately count	be paid on filing the following items should not be completed.  To claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are
<u>x</u>		mmissioner is hereby authorized to charge the following additional fees by this paper and the entire pendency of this application to Account No.
	<u>x</u>	37 CFR 1.16(a), (f) or (g) (filing fees)
	<u>x</u>	37 CFR 1.16(b), (c) and (d) (presentation of extra claims)
cancelled by amenda	nent prior t	for excess or multiple dependent claims not paid on filing or on later presentation must only be paid or these claims of the expiration of the time period set for response by the PTO in any notice of fee deficiency (37 CFR 1.16(d)), the PTO to charge additional claim fees, except possibly when dealing with amendments after final action.
	· —	37 CFR 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)
	<u>_X</u>	37 CFR 1.17 (application processing fees)
	- <sub>0</sub>	37 CFR 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 CFR 1.311 (b))
16. Instructions	As To	Overpayment
<u>X</u> _	credit A	ccount No. <u>04-0932</u>
	refund	A. Blee
		SIGNATURE OF ATTORNEY
Reg. No.: 37,221		Paul C. Remus Type or print name of attorney
Tel. No. (603) 66	9-1000	Devine, Millimet & Branch, P.A.
_ 1 2.0. (000) 00		P.O. Address
		Manchester, New Hampshire 03105

<u>x</u>	Incorp	corporation by reference of added pages					
		Check the following item if the application in this transmittal claims the be application(s) (including an international application entering the U.S. stage divisional or C-I-P application) and complete and attach the ADDED PAAPPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. CLAIMED	as a continuation				
	x_	Plus Added Pages For New Application Transmittal Where Benefit Of Prior Claimed	U.S. Application(s				
		Number of pages added	9				
	_	Plus Added Pages For Papers Referred To In Item 4 Above	•				
		Number of pages added					
	<u>x</u>	Plus "Assignment Cover Letter Accompanying New Application"					
		Number of pages added	1				
	-	Statement Where No Further Pages Added					

(If no further pages form a part of this Transmittal then end this Transmittal with this page and check the following item)

X This transmittal ends with this page.

# ADDED PAGES FOR APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED

NOTE:	"In order for an application to claim the benefit of a prior filed copending national application, the prior application must name as an
	inventor at least one inventor named in the later filed application and disclose the named inventor's invention claimed in at least one
	claim of the later filed application in the manner provided by the first paragraph of 35 U.S.C. 112." 37 CFR 1.78(a).

NOTE: "In addition the prior application must be (1) complete as set forth in § 1.51, or (2) entitled to a filing date as set forth in § 1.53(b) and include the basic filing fee set forth in § 1.16; or (3) entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(1) within the time period set forth in § 1.53(d)." 37 CFR 1.78(a).

#### 17. Relate Back

NOTE: "Any application claiming the benefit of a prior filed copending national or international application must contain or be amended to contain in the first sentence of the specification following the title a reference to such prior application identifying it by serial number and filing date or international application number and international filing date and indicating the relationship of the applications." 37 CFR 1.78(a). See also the Notice of April 28, 1987 (1079 O.G. 32 to 46).

[] Amend the Specification by inserting before the first line the sentence:

#### A. 35 U.S.C. 119(e)

NOTE: Any nonprovisional application claiming the benefit of one or more prior filed copending provisional applications must contain or be amended to contain in the first sentence of the specification following the title a reference to each such prior provisional application, identifying it as a provisional application, and including the provisional application number (consisting of series code and serial number)." 37 C.F.R. § 1.78(a)(4).

"This application claims the benefit of U.S. Provisional Application(s) No(s).:

APPLICATION NO(5).:	FILING DATE

NOTE:	"Any nonprovisional application claiming the benefit of one or more prior filed copending nonprovisional applications or international applications designating the United States of America must contain or be amended to contain in the first sentence of the specification following the title a reference to each such prior application, identifying it by application number (consisting of the series code and serial number) or international application number and international filing date and indicating the relationship of the applications. Cross-references to other related applications may be made when appropriate. (See § 1.14(b))." 37 C.F.R. § 1.78(2).			
[X]	"This a	pplication is a		
J	(X) (X)	continuation continuation-in-part divisional		
of cope	nding ap	plication(s)		
	[X]	application number 09/597,1	01 filed on June 20, 2000	
	D	International Application the U.S."	filed on	and which designated
NOTE:	The prop	per reference to a prior filed PCT applied PCT application which designated to	lication which entered the U.S. national phase is $t$ the U.S.	ne U.S. serial number and the filing
NOTE:	continua available the U.S. 371(c)(4 within ar filing is is due w	tion-in-part or (2) if it is desired to do or no fee is to be paid on filing then the is treated as the parent case in the U.S. ) which must meet the requirements of my term set by the PTO under 37 CFR as an international application entering thin 20 months of the priority date but date but can be submitted within 32 m	adds subject matter to the International Applie to for other reasons, e.g. where no declaration is efiling can be as a continuation. In these cases the land is an alternative to the completion of the Internative for the formative permits the cases of 37 CFR 1.61(a). This alternative permits the cases of 1.53(d) to which the extension provisions of 37 Cg the U.S. stage then the fee, declaration and/or Eat can be paid within 22 months of the priority date on the priority date on the first part of the priority date on the surcharges set of 1.136 do not apply to this 22 or (32 month) provided the priority of the priority of the priority of the priority date on the priority date of the priority date on the priority date on the priority date of the priority date on the priority date of the priority date on the priority date of the priority dat	is available, no English translation is international Application designating national Application under 35 U.S.C. ompletion of the filing requirements FR 1.136(a) apply. (Whereas, if the nglish translation (where necessary) e (or is due within 30 months of the forth in 37 CFR 1.492(e), (f) and 37
	0	"The nonprovisional application ASSIGNED), filed	ation designated above, namely applica, claims the benefit of U.S. Provisional	tion/(NOT YET Application(s) No(s).:
APPLI	CATIO	N NO(S).:	FILING DATE	

35 U.S.C. 120, 121 and 365(c)

B.

NOTE: The deadline for entering the national phase in the U.S. for an international application was clarified in the Notice of April 28, 1987 (1079 O.G. 32 to 46) as follows:

"The Patent and Trademark Office considers the International application to be pending until the 22nd month from the priority date if the United States has been designated and no Demand for International Preliminary Examination has been filed prior to the expiration of the 19th month from the priority date and until the 32nd month from the priority date if a Demand for International Preliminary Examination which elected the United States of America has been filed prior to the expiration of the 19th month from the priority date, provided that a copy of the international application has been communicated to the Patent and Trademark Office within the 20 or 30 month period respectively. If a copy of the international application has not been communicated to the Patent and Trademark Office within the 20 or 30 month period respectively, the international application becomes abandoned as to the United States 20 or 30 months from the priority date respectively. These periods have been placed in the rules as paragraph (h) of § 1.494 and paragraph (i) of § 1.495. A continuing application under 35 U.S.C. 365(c) and 120 may be filed anytime during the pendency of the international application."

#### Relate Back-35 U.S.C. 119 Priority Claim for Prior Application 18.

	The prior U.S. application(s), including any prior International Application designating the	e
U.S.,	identified above in item 17, in turn itself claim(s) foreign priority (ies) as follows:	

		country		appln. no.	filed on
The cert	tified co	py (ies)	has (have	)	
	Ð	been f	iled on _	in prior application 0_/	, which was filed on
	[]	is (are	) attached		
WARNIN	IG:	may not is so becand is n stage is applicat continui transfer Accordi	be relied of cause the co- ot assigned not entered- ion. An alt- ing applicat the certifi- ingly, the pro-	of the priority application which may have been communicated to file a certified copy of the priority application communicated by a U.S. serial number unless the national stage is entered. Therefore such certified copies may not be available if ernative would be to physically remove the priority docurrent. The resources required to request transfer, retrieved copies, enter and make a record of such copies in iority documents in folders of international applications lotice of April 28, 1987 (1079 O.G. 32 to 46).	application in the continuing application. This the International Bureau is placed in a folder of. Such folders are disposed of if the national needed later in the prosecution of a continuing ments from the folders and transfer them to the tee the folders, make suitable record notations, in the Continuing Application are substantial.
19.	Maint	enance o	f Copen	dency of Prior Application	
NOTE:	NOTE: The PTO finds it useful if a copy of the petition filed in the prior application extending the term for response is filed with the papers constituting the filing of the continuation application. Notice of November 5, 1985(1060 O.G. 27).				
	A.	0	Extens	ion of time in prior application	
(I	This item	nust be	complet	ed and the papers filed in the prior application application has run)	on if the period set in the prior
		0	A pet	ition, fee and response extends the term	in the pending prior application until
			D	A copy of the petition filed in prior applica	ation is attached
	В.	O	Condi	tional Petition for Extension of Time in Prior	Application
			1	complete this item if previous item not applic	rable)
		Π	A con	ditional petition for extension of time is being	filed in the pending prior application.
			IJ	A copy of the conditional petition filed in	the prior application is attached
20.	Furth	er Inven	torship S	Statement Where Benefit of Prior Applicat	ion(s) Claimed
NOTE:	a statem of the in	ent must a wention be	ccompany ting claimed	ion-in-part, or divisional application is filed by less than the application when filed requesting deletion of the name: in the continuation, continuation-in-part, or divisional aground continuation situation).	s of the person or persons who are not inventors

NOTE:	claimed and clair	oby § 1.6. addition, ms only s inventor	continuation-in-part application which adds and claims additional disclosure by amendment, an oath or declaration as 3 must be filed. In those situations where a new oath or declaration is required due to additional subject matter being al inventors may be named in the continuing application. In a continuation or divisional application which discloses subject matter disclosed in a prior application, no additional oath or declaration is required and the application must set the same or less than all the inventors in the prior application." 37 CFR 1.60(c). (dealing with the continuation
			(complete applicable item (a), (b) and/or (c) below)
	(a)	0	This application discloses and claims only subject matter disclosed in the prior application whose particulars are set out above and the inventor(s) in this application are
	•		[] the same
			less than those named in the prior application and it is requested that the following inventor(s) identified for the prior application be deleted:
•			
			(Type name(s) of inventor(s) to be deleted)
	(b)	[x]	This application discloses and claims additional disclosure by amendment and a new declaration or oath is being filed. With respect to the prior application the inventor(s) in this application are
			[x] the same
			the following additional inventor(s) have been added
			*
			(Type name(s) of inventor(s) to be added)
	(c) <sup>'</sup>	The in	wentorship for all the claims in this application are
		[x]	the same
		O	not the same, and an explanation, including the ownership of the various claims at the time the last claimed invention was made
			is submitted will be submitted

#### 21. Abandonment of Prior Application (if applicable)

Please abandon the prior application at a time while the prior application is pending or when the petition for extension of time or to revive in that application is granted and when this application is granted a filing date so as to make this application copending with said prior application.

According to the Notice of May 13, 1983 (103, TMOG 6-7) the filing of a continuation or continuation-in-part application is a proper NOTE: response with respect to a petition for extension of time or a petition to revive and should include the express abandonment of the prior application conditioned upon the granting of the peuton and the granting of a filing date to the continuing application.

## 22. Petition for Suspension of Prosecution for the Time Necessary to File an Amendment

WARNING:

"The claims of a new application may be finally rejected in the first Office action in those situations where (1) the new application is a continuing application of, or a substitute for, an earlier application, and (2) all the claims of the new application (a) are drawn to the same invention claimed in the earlier application, and (b) would have been properly finally rejected on the grounds of art of record in the next Office action if they had been entered in the earlier application." MPEP, § 706.07(b).

NOTE:

Where it is possible that the claims on file will give rise to a first action final for this continuation application and for some reason an amendment cannot be filed promptly (e.g., experimental data is being gathered) it may be desirable to file a petition for suspension of prosecution for the time necessary.

(check the next item, if applicable)

[] There is provided herewith a Petition To Suspend Prosecution for the Time Necessary to File An Amendment (New Application Filed Concurrently)

#### 23. Small Entity (37 CFR § 1.28(a))

- [x] Applicant has established small entity status by the filing of a verified statement in parent application 09 / 597,101 on \_6/20/2000 \_\_\_\_\_\_.
  - [x] A copy of the verified statement previously filed is included.

WARNING:

"Status as a small entity in one application or patent does not affect any other application or patent, including applications or patents which are directly or indirectly dependent upon the application or patent in which the status has been established. Applications filed as continuations, divisions or continuations-in-part of a parent application must include a reference to a verified statement filed in the parent application if status as a small entity is still proper and desired." 37 CFR § 1.28(a).

## 24. NOTIFICATION IN PARENT APPLICATION OF THIS FILING

[] A notification of the filing of this

(check one of the following)

- [] continuation
- [x] continuation-in-part
- divisional

is being filed in the parent application from which this application claims priority under 35 USC § 120.